

REMARKS

Claims 1-20 are canceled. New claims 21-26 have been added and contain no new matter. Thus, claims 21-26 are pending in the application.

Claims 1-20 were previously rejected under 35 U.S.C. §103(a) as being unpatentable by U.S. Patent No. 6,538,577 to Ehrke in view of either U.S. Patent No. 6,622,097 to Hunter or U.S. Patent No. 5,696,695 to Ehlers.

Claims 1-20 have been canceled. New independent claim 21 and dependent claims 22-26 have been added to more clearly define the invention. No new matter has been added by the new claims which are well supported in the specification.

The Final Office Action maintained that:

“Ehrke discloses: receiving a demand-response event requested over a wide area network from the utility to a gateway (i.e. the utility transmits a demand request over a WAN to the gateway) (column 7, lines 1-8, FIG. 9A [])...in communication with a local network (i.e. LAN),

forwarding the demand-response event request through the local network to a translator for the operational resource consuming device and translating (i.e. converting) the request into a native format for the operational resource consuming device (column 7, lines 9-20 [])...

receiving and storing post demand-response event data from the -operational resource consuming device (column 7, lines 20-22 and 56-57 and column 9, lines 30-38 [])...and

forwarding the post demand-response event data through the wide area network to the utility (column 7, lines 25-33, "As shown in FIG. 15B [])..."

Applicants respectfully submit that the Examiner has misconstrued the cited portions of Ehrke which merely disclose an electric meter for collecting, processing, and transmitting commodity utilization

data and power quality information to a utility over a WAN. A gateway node provides the end-to-end communication links from the meter to the utility over a WAN. An RF transceiver in the meter creates a link between the meter and the gateway node located remotely from the meter. The gateway node receives interrogation signals from the meter. Data stores and scheduler components comprise data that is preprogrammed into the gateway node's memory. The utility is able to initiate a data request from the electric meter by sending a data stream over a WAN. The gateway node may or may not be included in the round trip communication path. The gateway can initiate a data transmission to the utility based on the gateway's scheduler, and triggered by the data preprogrammed into the gateway node's memory. The system can instantiate a virtual shut-off of the electric meter. The gateway node processes the rules associated with the "set virtual shut-off" message and sends the results to the meter.

In contrast to Applicant's claimed method which is directed to utility demand response, Ehrke's device is directed to automated meter reading. In this regard, Applicant's claimed method comprises steps completely different from those taught in Ehrke. For example, Ehrke's above-described "virtual shut-off" feature is not the same as the demand management method of claim 21. Rather, virtual shut-offs are used to prevent customers who have not paid their bills or have not actually moved from their premises from continuing to use a utility resource such as electricity.

Even as construed by the Examiner, Applicants submit that the above-quoted portions of Ehrke do not teach or suggest, among other things, "initiating a state change from a utility computing platform, to affect resource consumption at at least one premise"; "receiving said state change from said utility computing platform at a gateway at said at least one premise"; processing, at said gateway, said state change from said utility computing platform to determine an energy management scheme for affecting resource consumption at said at least one premise"; and "translating, at said gateway, said state change from said utility computing platform into a native format used by at least one device in said network of devices consuming said resource." Among other things, there is no teaching or suggestion of "generating

control signals to control said network of devices consuming said resource, said control signals being a function of said state change from said utility platform and said energy management scheme determined by processing at said gateway” as specifically recited in Applicants’ new claim 21. Further, there is no teaching or suggestion in Ehrke whatsoever of “monitoring consumption of devices at said gateway to determine compliance with said energy management scheme;” and “feeding back to said utility computing platform results of said monitoring step” as particularly disclosed and claimed by Applicants in new claim 22.

In addition, the Office Action alleged that the Hunter reference teaches:

“analyzing the post demand-response event data to maximize efficiency and cost savings by adjusting output of the resource is...by including a graphical user interface (column 6, lines 50-64) and a user interface control mechanism for selecting portions of the user interface (i.e. mouse pointer) (Figure 6 and column 7, lines.30-35)...

in order to initiate a state change of the operational resource consuming device (column 7, lines 56-63 [])...for cost efficiency (column 8, lines 18-26 [])...”

Applicants respectfully submit that the Examiner has misconstrued the cited portions of Hunter which describe an electro-optical, automatic meter reader for enabling a consumer to view and manage power consumption on the consumer’s computer (also referenced as “monitoring device”), which may be a computer or PDA. The computer provides the consumer with a centralized location to either directly or remotely view and manage his power consumption. The consumer may program the computer to automatically control the rate of power consumption. The computer system controls an amount of power consumption by controlling a device that consumes electricity based on a forecast. Specifically, the computer system computes a forecast of electric power consumption for a predetermined period of time based on usage for a portion of the predetermined period of time. The system controls the device so that usage for the predetermined time period falls below a predetermined amount. The Internet can be used to allow the computer to communicate to the utility company for billing purposes or allow the consumer to access and manage his power consumption from a remote computer or PDA.

Hunter further teaches an interface, such as a web-based interface, for allowing the user to monitor the information relating to power consumption. The interface may provide the end-user with information on what devices are currently being used, allowing the end-user to manage the rate of consumption for that household. The reference also discloses remote accessing of the data by a utility company for billing purposes or by the end-user for controlling his power consumption from his PDA or computer. The utility can communicate with the computer to obtain the data for billing purposes. For example, the utility may download the monthly power consumption information from the Internet. In addition, a landlord or utility company can remotely control power-consuming devices to regulate the rate of power consumption while not physically going there. For example, the utility company may turn off certain devices such as HVAC systems when the power-grid is approaching maximum capacity.

Hunter also discloses a method of monitoring and controlling power consumption including reading power consumption data from an electric utility meter using an automatic reader. Data is collected from an electric utility meter using an automatic reader. A forecast of electric power consumption for a predetermined period of time is computed based on usage for a portion of the time period using a computer system. The method allows controlling an amount of power consumption by the computer system controlling the device that consumes electricity based on the forecast, so that usage for the time period falls below a predetermined amount.

The Hunter reference, among other things, nowhere discloses or suggests the computer system (a.k.a, a gateway) working collaboratively with the utility's central computer to develop an energy management scheme to manage power consumption. Further, there is NO disclosure or suggestion of the utility in Hunter managing a population of premises via a method such as Applicants.

Applicants submit that the cited portions of Hunter, moreover, fail to teach or suggest Applicants' claimed method including steps of "initiating a state change from a utility computing platform, to affect resource consumption at at least one premise"; "receiving said state change from said utility computing

platform at a gateway at said at least one premise”; “processing, at said gateway, said state change from said utility computing platform to determine an energy management scheme for affecting resource consumption at said at least one premise” and “translating, at said gateway, said state change from said utility computing platform into a native format used by at least one device in said network of devices consuming said resource.” There is no teaching or suggestion of “generating control signals to control said network of devices consuming said resource, said control signals being a function of said state change from said utility platform and said energy management scheme determined by processing at said gateway”. Furthermore, there is no teaching or suggestion in Hunter of “monitoring consumption of devices at said gateway to determine compliance with said energy management scheme;” and “feeding back to said utility computing platform results of said monitoring step” as particularly disclosed and claimed by Applicants.

In addition, the Office Action maintained that the Ehlers reference teaches:

“a system for rate-related control of electrical loads including a menu and button driven graphical user interface (column 14, lines 38-56 and Figures 11-15)...It would have been obvious to...provide a menu and button driven interface, as taught by Ehlers, because Ehlers suggests a common user-friendly interface that would have allowed the user to control desired devices without requiring complex programming knowledge (column 14, lines 38-56).”

Applicants respectfully submit that the Examiner has misconstrued the cited portions of Ehlers which merely discloses an energy management and building automation system having a control module for connecting to a bus each load to be controlled, and microcomputers at a utility power meter and in the customer premises. The system includes a local area network or home automation data bus such as the CEBus. Each load to be controlled is connected to the bus via a control module. The control module contains a relay or switch to disconnect the load from the mains upon command or upon occurrence of a power outage. Monitoring control modules determine whether connected loads are drawing current and

power monitor modules monitor the power consumed by selected loads. Both types of monitors place messages on the bus to indicate load status or changes in load status. A first microcomputer is placed externally to the customer premises, adjacent the electric utility power meter. A second microcomputer preferably is placed inside the customer premises. The two microcomputers communicate with each other and with the various load control modules via the network/data bus.

Applicants submit that the cited portions of Ehlers fail to teach or suggest “initiating a state change from a utility computing platform, to affect resource consumption at at least one premise, and receiving said state change from said utility computing platform at a gateway at said at least one premise”; “processing, at said gateway, said state change from said utility computing platform to determine an energy management scheme for affecting resource consumption at said at least one premise, and translating, at said gateway, said state change from said utility computing platform into a native format used by at least one device in said network of devices consuming said resource.” Like Ehrke and Hunter, there is no teaching or suggestion in Ehlers of “generating control signals to control said network of devices consuming said resource, said control signals being a function of said state change from said utility platform and said energy management scheme determined by processing at said gateway”. Like Ehrke and Hunter, there is no teaching or suggestion in Ehlers of “monitoring consumption of devices at said gateway to determine compliance with said energy management scheme, and feeding back to said utility computing platform results of said monitoring step” as particularly disclosed and claimed by Applicants.

From the foregoing, it is clear that neither Ehrke, Hunter nor Ehlers alone or in combination disclose or suggest each and every element of new independent claim 21 or claims dependent thereon. Accordingly, Applicant submits that new independent claim 21 and new claims 22-26 depending therefrom are patentable over Ehrke, Hunter and Ehlers.

In addition, the Examiner alleges that “the prior art made of record and not relied upon is considered pertinent to Applicant's disclosure,” and asserts, for example, that “U.S. Patent No. 5,818,725 to McNamara et al. teaches a system for utility demand monitoring and control.”

Applicants respectfully submit that the Examiner has misconstrued the prior art made of record, which in most cases generally teaches power monitoring networks and control systems. For example, communication in the McNamara system is between a mainframe host computer at the power utility company central offices and the homes of the customers serviced by the utility. The home network includes electrical control, monitoring, and measurement devices. The system allows monitoring and controlling customer power demand and an information distribution network allows the collection and transmission of user demand requirements. The controlled load management and feedback system includes a power company central computer facility, a plurality of site monitoring and control networks, and one or more wide band distribution networks interconnecting site monitoring and controls networks and the central computer facility.

McNamara also teaches a host computer having access to power utility customers for receiving customer utility usage data. The utility central computer is able to forecast trends and predict when demand will exceed supply, thus allowing corrective action to be taken. The system can generate reports for utility management and consumers showing usage and savings through demand management. This addressing structure allows the network manager to directly communicate with each individual IUU (intelligent utility unit) or network interface, a group of IUUs, etc. The IUU controls, communicates, and configures devices within the home network, and communicates information from the home network back to the utility central computer via distribution network. The IUU, located at each home, allows the utility to monitor electrical consumption in real time and help the customer optimize electrical power consumption. The IUU is further connected to sensors and switches, etc. Additionally, an optional user interface is provided with a readout provided by the television set or LCD panel, and a plurality of

network interfaces relay customer utility demand as collected from industrial equipment by a power monitoring unit.

Among other things, the McNamara reference and all the other prior art made of record but not relied upon nowhere discloses or suggests how power consumption will be managed. Furthermore, the McNamara reference fails to disclose or suggest the computer system (a.k.a., the gateway) working collaboratively with the utility's central computer to develop an energy management scheme to manage power consumption.

Applicants submit that the prior art made of record but not relied upon fails to teach or suggest "initiating a state change from a utility computing platform, to affect resource consumption at at least one premise, and receiving said state change from said utility computing platform at a gateway at said at least one premise"; "processing, at said gateway, said state change from said utility computing platform to determine an energy management scheme for affecting resource consumption at said at least one premise, and translating, at said gateway, said state change from said utility computing platform into a native format used by at least one device in said network of devices consuming said resource." There is no teaching or suggestion in the prior art of "generating control signals to control said network of devices consuming said resource, said control signals being a function of said state change from said utility platform and said energy management scheme determined by processing at said gateway". The prior art does not disclose or suggest "monitoring consumption of devices at said gateway to determine compliance with said energy management scheme, and feeding back to said utility computing platform results of said monitoring step" as particularly disclosed and claimed by Applicants.

CONCLUSION

In view of the above, reconsideration and allowance of this application as amended are now believed to be in order, and such action is hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below. The Examiner is invited and encouraged to telephone the undersigned with any concerns in furtherance of the prosecution of the present application.

Please charge any fee(s) that may be associated with this Response to Deposit Account No. 50-0369.

Respectfully submitted,

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